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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/540,089

06/20/2005

Per-Ingvar Branemark

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6438

616 7590 09/19/2007  
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EXAMINER

WOODALL, NICHOLAS W

ART UNIT

PAPER NUMBER

3733

MAIL DATE

DELIVERY MODE

09/19/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/540,089

Applicant(s)

BRANEMARK, PER-INGVAR

Examiner

Nicholas Woodall

Art Unit

3733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This action is in response to applicant's amendment received on 08/30/2006.

#### ***Drawings***

2. The drawings were received on 08/30/2007. These drawings are acceptable.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 35 provides for the use of a fixture, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced. The examiner will interpret the claims as a functional recitation of intended use for examination purposes.

Claim 35 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 11-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olson (U.S. Patent 2,113,600) in view of Guedj (U.S. Patent 5,871,356).

Regarding claim 11, Olson discloses a device comprising a generally cylindrical anchoring portion and a number of slots extending from the insertion end (see Figure 1 below). The anchoring portion includes an insertion end and includes an external screw thread. The slots are defined by a leading slot wall and a trailing slot wall related to the direction of rotation defined by the external thread, wherein at least the radial outermost part of the trailing slot wall defines an angle alpha with the radial direction and slopes obliquely forward from within and outwardly in the direction of rotation. Regarding claim 12, Olson discloses a device wherein the entire trailing slot wall defines the angle alpha with the radial direction. Regarding claim 13, Olson discloses a device wherein the leading slot wall also slopes obliquely forward from within and outward in the direction of rotation. Regarding claim 14, Olson discloses a device wherein the leading and trailing slot walls are parallel with one another. Olson fails to disclose a device further comprising a cavity that opens out at the insertion end in communication with the slots, wherein the cavity includes a circular cross-section and widens conically in a direction towards the insertion end. Guedj teaches a device comprising an anchor portion

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including a cavity that opens out at an insertion end in communication with slots, wherein the cavity includes a circular cross-section and widens conically in a direction towards the insertion end in order to guide bone shavings cut by the slots in the direction of the cavity (column 3 lines 11-18). It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Olson further comprising a cavity that opens out at the insertion end in communication with the slots, wherein the cavity includes a circular cross-section and widens conically in a direction towards the insertion end in view of Guedj in order to guide the bone shavings cut by the slot in the direction of the cavity.

Regarding claims 15-20 and 30-33, the combination of Olson and Guedj disclose the invention as claimed except for the angle  $\alpha$  being between 20 to 40 degrees at the outer radial outer end of the trailing slot wall (claims 15-18), the angle  $\alpha$  being between 27 to 33 degrees at the radial outer end of the trailing slot wall (claims 19 and 20), the number of slots being between 3 to 10 slots (claims 21-23), the number of slots being between 5 to 7 (claims 24-26), and the slot width at the outer end of the slot corresponds to 15 to 35 percent of the peripheral distance between two slots on the outside of the fixture (claims 30-33). It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Olson modified by Guedj wherein the angle  $\alpha$  is between 20 to 40 degrees, wherein the angle  $\alpha$  is between 27 to 33 degrees, wherein the number of slots is between 3 to 10, wherein the number of slots is between 5 to 7, and wherein the slot width corresponds to 15 to 35 percent of the peripheral distance between two slots on the

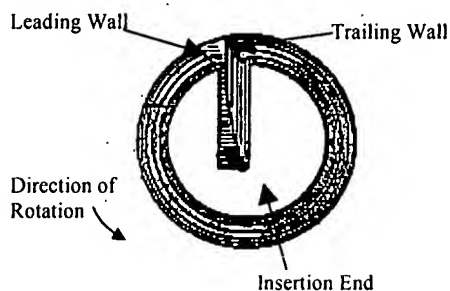
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outside of the fixture, since it has been held that where the general conditions of a claim are disclosed in the prior art discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Regarding claim 34, the combination of Olson and Guedj disclose the invention as claimed except for the device being made from titanium. It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Olson modified by Guedj from titanium, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 35, the combination of Olson and Guedj disclose a device capable of being used to anchor a prosthesis in bone tissue.

Figure 1



### ***Response to Arguments***

8. Applicant's arguments with respect to claims 11-35 have been considered but are moot in view of the new ground(s) of rejection. The examiner has presented new grounds of rejection not necessitated by amendment making this office action non-final.

**Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 for cited references the examiner felt were relevant to the application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Woodall whose telephone number is 571-272-5204. The examiner can normally be reached on Monday to Friday 8:00 to 5:30 EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NWW

  
EDUARDO C. ROBERT  
SUPERVISORY PATENT EXAMINER